

Lesson 2-4

Bar Graphs and Line Graphs

Lesson Objective

To make and analyze bar graphs and line graphs

NAEP 2005 Strand: Data Analysis and Probability

Topic: Data Representation

Local Standards: _____

Vocabulary

A bar graph uses _____

A line graph uses _____

Example

- ① **Bar Graph** Make a bar graph to display the data in the table. Compare the number of 16-year-olds to the number of 14-year-olds with employer jobs.

Students With Employer Jobs

Age	Number of Students
14	33
15	60
16	74

Draw and label the horizontal and vertical axes.

Choose a scale. The data go from 33 to 74. Mark 0 to 80 in intervals of 10.

Choose an appropriate title.

Draw bars of equal widths. The heights will vary.

More than as many 16-year-olds as 14-year-olds have employer jobs.

Quick Check

1. Find the difference between the number of 14-year-olds and the number of 15-year-olds with employer jobs.

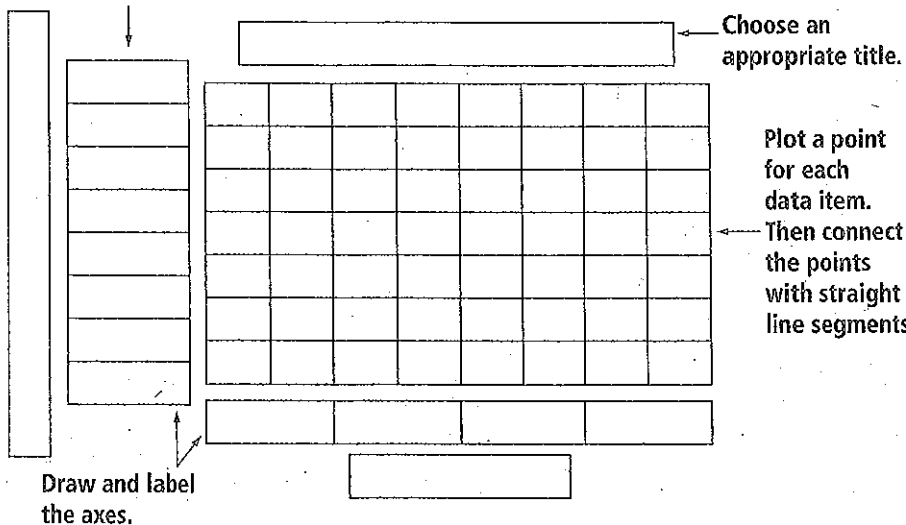
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Examples

- ② **Using a Line Graph** Use the data in the table to make a line graph. Describe the change in sales between March and May.

The data range from 45 to 121. Mark 0 to 140 in units of 20.



Running Shoes Sold

Month	Pairs Sold
February	54
March	86
April	121
May	115

Sales increased from March to April. Then they began to decrease.

- ③ **Selecting a Type of Graph** Which type of data display is the most appropriate to show a comparison of the data in the table at the right? Explain.

Use a _____, since you want to show _____.

Favorite Sandwiches

Type of Sandwich	Number of Students
Egg salad	8
Peanut butter	15
Tuna	12
Turkey	17

Quick Check

2. Based on the graph in Example 2, are the sales of running shoes in June likely to be greater or less than 70 pairs? Explain.

3. Which type of data display is the most appropriate to display the data at the right? Explain.

Ticket Sales

Week	1	2	3	4
Tickets Sold	22	35	33	46

Homework Exercises

Directions: Complete problems #5-8 on page 76 of your textbook.

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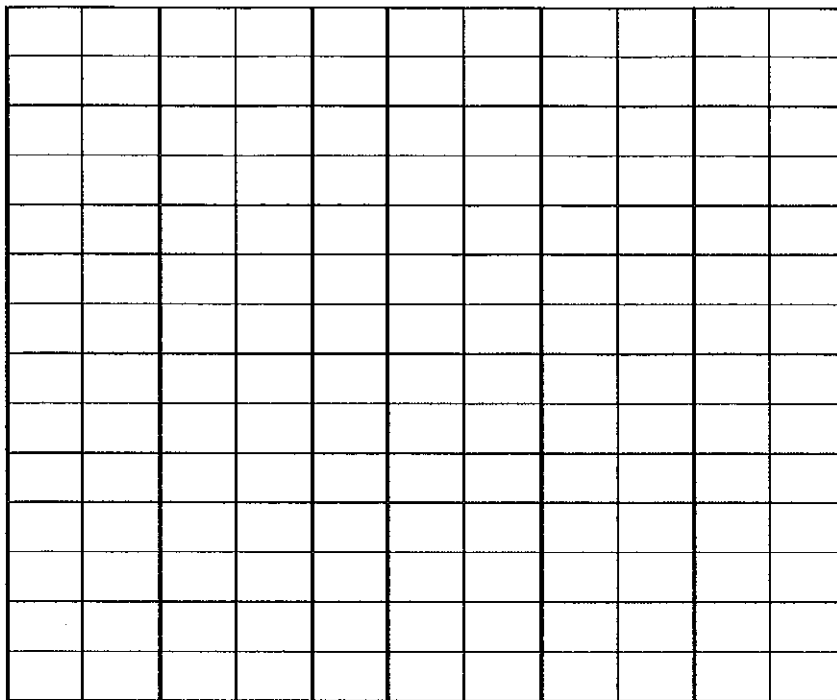
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